

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) A method for supporting an interworking between a ~~W~~ireless ~~L~~ocal ~~A~~rea ~~N~~etwork (WLAN) and a mobile communications network, the mobile communications network including a radio access network comprising a transceiver coupled to a radio network controller, the radio network controller being coupled to a core network, the method comprising the steps of:
providing an ~~I~~nter~~W~~orking ~~F~~unction (IWF) disposed on the WLAN side of the interworking; and
connecting the WLAN to the mobile communications network by employing the IWF as an auxiliary radio network controller associated with the mobile communications network.
2. (currently amended) The method of claim 1, wherein the mobile communications network comprises a UMTS network and the IWF is employed as a ~~D~~rift ~~R~~adio ~~N~~etwork ~~C~~ontroller (DRNC).
3. (original) The method of claim 2, wherein said connecting step connects the WLAN to the mobile communications network through a user plane interface.
4. (currently amended) The method of claim 2, wherein the mobile communications network has a ~~S~~erving ~~R~~adio ~~N~~etwork ~~C~~ontroller (SRNC), and the user plane interface is disposed between the IWF and the SRNC.
5. (currently amended) The method of claim 4, wherein said connecting step comprises the step of establishing ~~(175)~~ an Iur interface between the IWF and the SRNC.

6. (currently amended) The method of claim 5, further comprising the step of diverting ~~(175)~~ data from the SRNC to the WLAN through the Iur interface.
7. (original) The method of claim 2, wherein said connecting step splits a control plane between the mobile communications network and the WLAN and also splits a user plane between the mobile communications network and the WLAN.
8. (currently amended) The method of claim 7, wherein said connecting step comprises the step of transmitting ~~(215)~~ a radio link setup request from the SRNC to the IWF.
9. (currently amended) The method of claim 8, wherein said transmitting step is performed using a ~~R~~radio ~~N~~etwork ~~S~~ubsystem ~~A~~pplication ~~P~~art (RNSAP) message that includes at least one of ~~Q~~uality of ~~S~~ervice (QoS) parameters and a type of dedicated/common transport channel.
10. (currently amended) The method of claim 4, further comprising the step of performing ~~(225)~~ ~~C~~all ~~A~~dmission ~~C~~ontrol (CAC) by the IWF.
11. (currently amended) The method of claim 10, wherein said performing step is implemented based upon at least one of a type of service assigned by the IWF, a type of dedicated/common transport channel requested by the SRNC, and WLAN resources available in an ~~A~~ccess ~~P~~oint (AP) to which a ~~U~~ser ~~E~~quipment (UE) will attach.
12. (currently amended) The method of claim 4, wherein the mobile communications network further includes a ~~S~~erving ~~G~~eneral ~~P~~acket ~~R~~adio ~~S~~ervice (GPRS) ~~S~~upport ~~N~~ode (SGSN), a ~~G~~ateway ~~G~~eneral ~~P~~acket ~~R~~adio ~~S~~ervice (GPRS) ~~S~~upport ~~N~~ode (GGSN), and a ~~N~~ode B, and said method further comprises the steps of:
- forming a data path from a ~~U~~ser ~~E~~quipment (UE) to the IWF to the SRNC to the SGSN to the GGSN; and
- forming a control path from the UE to the ~~N~~ode B to the SRNC to the SGSN to the GGSN.

13. (currently amended) The method of claim 2, further comprising the step of releasing ~~(250)~~ data bearers of the mobile communications network when activity has ceased on data channels of the mobile communications network.

14. (currently amended) An apparatus for supporting an interworking between a ~~W~~ireless ~~L~~ocal ~~A~~rea ~~N~~etwork (WLAN) and a mobile communications network, the interworking being facilitated by an ~~I~~nter~~W~~orking ~~F~~unction (IWF) disposed on a WLAN side of the interworking, the apparatus comprising:

means for connecting the WLAN to the mobile communications network using the IWF as a ~~D~~rift ~~R~~adio ~~N~~etwork ~~C~~ontroller (DRNC) for the mobile communications network.

15. (original) The apparatus of claim 14, wherein said means for connecting connects the WLAN to the mobile communications network through a user plane interface.

16. (currently amended) The apparatus of claim 14, wherein the mobile communications network has a ~~S~~erving ~~R~~adio ~~N~~etwork ~~C~~ontroller (SRNC), and the user plane interface is disposed between the IWF and the SRNC.

17. (original) The apparatus of claim 16, wherein said means for connecting comprises means for establishing an Iur interface between the IWF and the SRNC.

18. (original) The apparatus of claim 17, further comprising means for diverting data from the SRNC to the WLAN through the Iur interface.

19. (original) The apparatus of claim 14, wherein said means for connecting splits a control plane between the mobile communications network and the WLAN and also splits a user plane between the mobile communications network and the WLAN.

20. (original) The apparatus of claim 19, wherein said means for connecting comprises means for transmitting a radio link setup request from the SRNC to the IWF.

21. (currently amended) The apparatus of claim 20, wherein said means for transmitting uses a ~~R~~radio ~~N~~etwork ~~S~~ubsystem ~~A~~pplication ~~P~~art (RNSAP) message that includes at least one of ~~Q~~uality of ~~S~~ervice (QoS) parameters and a type of dedicated/common transport channel.

22. (currently amended) The apparatus of claim 16, further comprising means for performing ~~C~~all ~~A~~dmission ~~C~~ontrol (CAC) by the IWF.

23. (currently amended) The apparatus of claim 22, wherein said means for performing CAC employs at least one of a type of service assigned by the IWF, a type of dedicated/common transport channel requested by the SRNC, and WLAN resources available in an ~~A~~ccess ~~P~~oint (AP) to which a ~~U~~ser ~~E~~quipment (UE) will attach.

24. (currently amended) The apparatus of claim 16, wherein the mobile communications network further includes a ~~S~~erving ~~G~~eneral ~~P~~acket ~~R~~adio ~~S~~ervice (GPRS) ~~S~~upport ~~N~~ode (SGSN), a ~~G~~ateway ~~G~~eneral ~~P~~acket ~~R~~adio ~~S~~ervice (GPRS) ~~S~~upport ~~N~~ode (GGSN), and a ~~N~~ode B, and said apparatus further comprises:

means for forming a data path from a ~~U~~ser ~~E~~quipment (UE) to the IWF to the SRNC to the SGSN to the GGSN; and

means for forming a control path from the UE to the ~~N~~ode B to the SRNC to the SGSN to the GGSN.

25. (original) The apparatus of claim 14, further comprising means for releasing data bearers of the mobile communications network when activity has ceased on data channels of the mobile communications network.